GROUP
斯 拜 科
Good Quality Comes
From Qualified Materials

Excellent Sunless Tanning Solution

Tanbest® Series ›››

Tanbest® DHA

Dihydroxyacetone
Code: 18000100

Tanbest® DHA Premium

Dihydroxyacetone, Poria Cocos Sclerotium Extract
Code: 18000108

Tanbest® DHB

Erythrulose
Code: 18000300

Tanbest® 8810

Dihydroxyacetone, Erythrulose, Trehalose
Code: 18000200

Tanbest® Series, natural and safe sunless self-tanning agents, these ingredients give the skin a beautiful sun-kissed look without exposure to the harmful rays of the sun.

Tanbest® Series tan the skin in just a few hours by binding to amines, peptides, proteins and free amino acids of the outer layers of the stratum corneum to generate a Maillard reaction, the resulting tan of the skin brown pigments can last for up to two weeks, then it fades either naturally by natural exfoliation or mechanically by using a peeling.

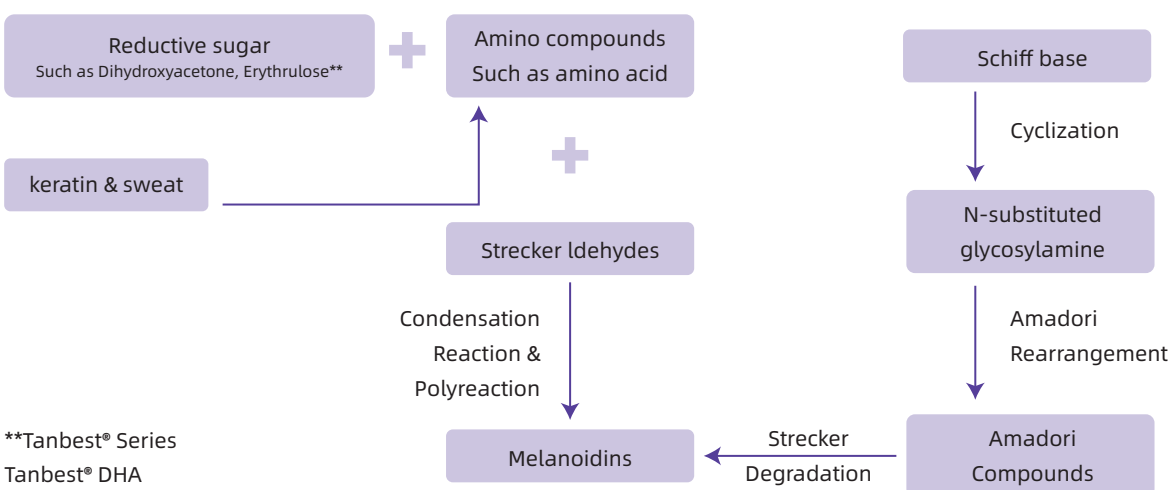
Benefits

- Natural and safe
- Green and sustainable
- A noticeable and healthy-looking tan
- Fast, prolonged and even
- Soothing and moisturizing
- UVA protection and anti-aging

Applications

- Skin self-tanning
- Natural hair dye
- Make-up (Eyebrow, Eyeliner, Eye shadow, Mascara)

Action Mechanism of the Self-tanning Agents--Maillard Reaction



**Tanbest® Series
Tanbest® DHA
Tanbest® DHA Premium
Tanbest® DHB
Tanbest® 8810
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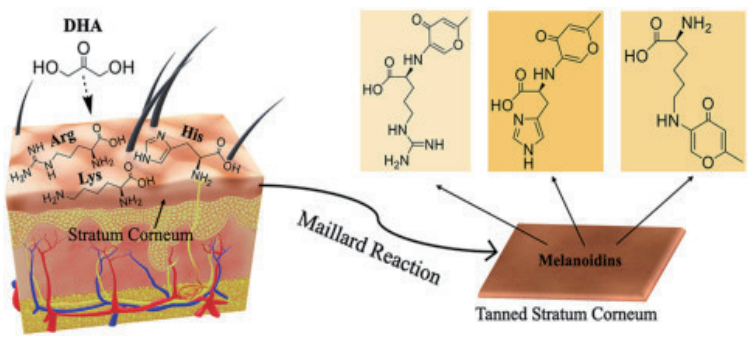
Tanbest® DHA

Product Introduction

Tanbest® DHA（Dihydroxyacetone) is an excellent sunless tanning active ingredient and has been widely used as the main tanning agent in sunless tanners.

The DHA-induced tan is a result of brown melanoidins formed by a non-enzymatic Maillard reaction between DHA and amino acid species found in the stratum corneum.

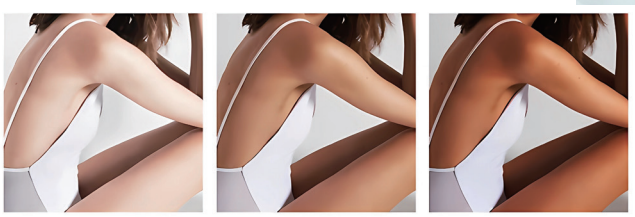


A simplified model system: the colour development mechanism of DHA

Key advantages

- Bio-fermentation and Eco-friendly
- Excellent coloring ability
- Protecting the skin from UV light damage
- Masking hypopigmented vitiligo macules
- A colouring agent for natural non-oxidising hair dyes

Tanning Solution

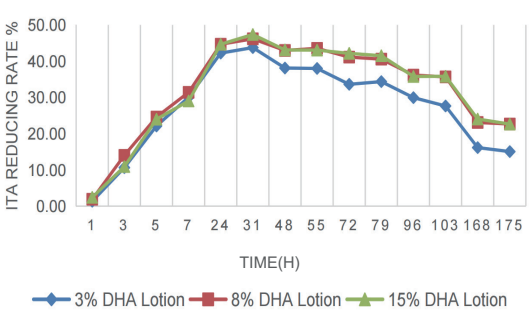


Product Information

Items	Specification
INCI Name	Dihydroxyacetone
CAS No.	96-26-4
Appearance	White to almost white fine crystalline-free flowing powder. eventually with granular parts
Assay	98.0 - 102%
Identity (IR-spectrum)	Conforms
Appearance of solution (10%; water/ethanol 96%; (20/80))	Transparent without any cloudiness for 72 hours
Appearance of solution, colour (25%, water)	≤ 50 Hazen
Water	≤ 0.2%
pH (5%)	4.0 – 6.0
Glycerol	≤ 0.5%
Protein (colorimetric)	≤ 0.1%
Iron	≤ 20 ppm
Methanal	≤ 50 ppm
Formic acid	≤ 30 ppm
Sulfated ashed (600℃)	≤ 0.1%
Volatile Matter	≤ 0.5%
Heavy metal control	Conforms
Microbial control	Conforms
Solubility	Water soluble
Rec. use level	1 - 30%

Product Efficacy

The reducing rate of ITA at different times



Typical subject photos at 31 h:

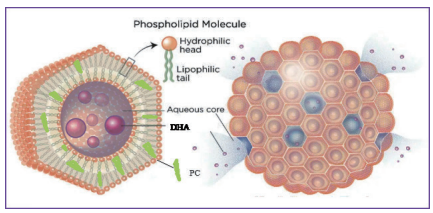
Results:

The tanning effects of 8% DHA lotion were comparable with 15% lotion, both better than 3% DHA lotion.

Tanbest® DHA Premium

Product Introduction

Tanbest® DHA Premium is a liposome structure, composed of Dihydroxyacetone and Poria Cocos Sclerotium Extract that benefits premium quality and additional protection to UV damage and photo aging.



Key advantages

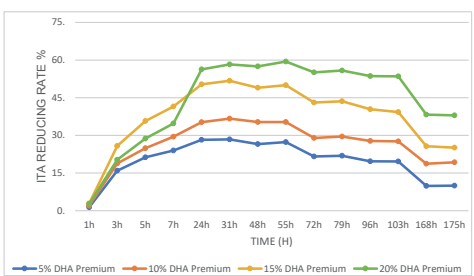
- Liposome encapsulation technology
- More stable, efficient and release slowly
- More effects like darker tanning
- Anti-photoaging and anti-aging

Product Information

Items	Specification
INCI Name (Active)	Dihydroxyacetone, Poria Cocos Sclerotium Extract
CAS No.	96-26-4, 168456-53-9
Appearance	Yellow liquid
Odor	Characteristic
Assay Dihydroxyacetone	35.0 - 45.0%
pH (5%)	3.0 - 6.0
Total plate count	≤ 100 cfu/g
Yeast & mould	≤ 100 cfu/g

Product Efficacy

The reducing rate of ITA at different times

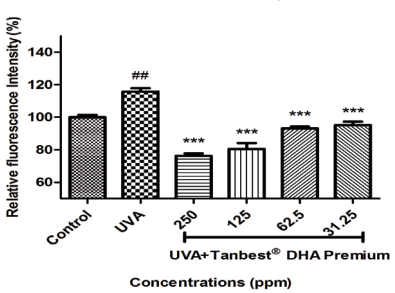


Typical subject photos at 31 h:

Result:

- Colouring speed: 15% DHA Premium lotion > 20% DHA Premium lotion > 10% DHA Premium lotion > 5% DHA Premium lotion.
- Better tanning with the higher concentration of DHA Premium.

Influence of Tanbest® DHA Premium on ROS relative fluorescence intensity



(##p<0.01 vs control, ***p<0.001 vs UVA)

Results:

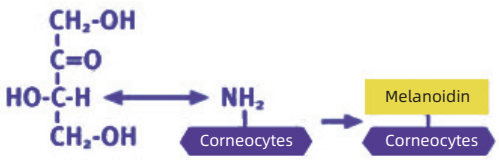
- After UVA stimulates the fibroblasts, intracellular ROS accumulates in large quantities in a short period of time and mediates the cellular oxidative stress damage.
- Compared with UVA, the inhibition ratio on ROS can reach up to 34.1% at 250ppm of Tanbest® DHA Premium group, and the inhibition effect was concentration-dependent.
- Tanbest® DHA Premium can enhance the cellular antioxidant capacity and has the anti-photoaging efficacy.

Tanbest® DHB

Product Introduction

Tanbest® DHB (Erythrulose) is a yellowish solution of a natural keto-sugar by green and natural fermentation. It reacts via the Maillard reaction with free amino groups in the upper layers of the stratum corneum, yielding to brown polymeric products (melanoids) that are directly bound to the skin.

Tanbest® DHB is often used in combination with DHA to produce a more even, longer-lasting tan with less streaking or patchiness and to improve the overall tanning effect.



Tanbest® DHB Action Mechanism

Key advantages

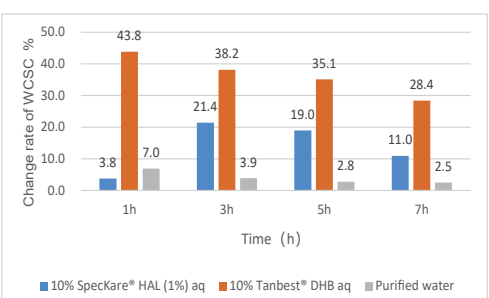
- Excellent compatible with DHA in formulations
- Long lasting color
- Even skin tone
- Less streaking and patchiness
- Moisturizing and less skin drying

Product Information

Items	Specification
INCI Name	Erythrulose, Water
CAS No.	533-50-6, 7732-18-5
Appearance	Light yellow to yellow, viscous liquid
pH (in 50% water)	2.0 - 3.5
Erythrulose	≥ 76% (m/m)
Total nitrogen	≤ 0.1%
Sulfated ash	≤ 1.5%
Preservatives	Negative
Specified pathogens	Negative
Heavy metal control	Conforms
Microbial control	Conforms
Solubility	Water soluble
Rec. use level	1 - 20%

Product Efficacy

Change rate of water content in stratum corneum (WCSC) at different time



Result:

- Compared with the control group, the WCSC of the skin when used the 10% Tanbest® DHB aq was increased.
- The moisturizing property of 10% Tanbest® DHB aq was superior than 10% SpecKare® HAL (1%) aq.
- Tanbest® DHB had good moisturizing ability to the skin.

Tanbest® 8810

Product Introduction

Tanbest® 8810 is a compound solution of Dihydroxyacetone, Erythrulose and Trehalose that easily reaches a fast and desirable even tan effect at a low use level.

Key advantages

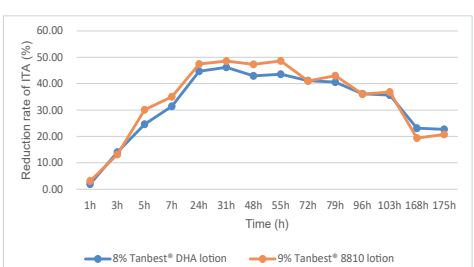
- Bio-fermentation and Eco-friendly
- Natural, long-lasting and even
- Gentle on the skin and moisturizing
- Soothing and anti-aging
- Liquid form, easy to use

Product Information

Items	Specification
INCI Name	Dihydroxyacetone, Erythrulose, Trehalose, Water
CAS No.	96-26-4, 533-50-6, 6138-23-4, 7732-18-5
Appearance	Light Yellow, viscous liquid
pH (in 10% water)	2.0 - 4.0
Erythrulose content	20.0 ± 2.0%
Dihydroxyacetone content	55.0 ± 2.0%
Sulfated ash	≤ 0.5%
Specified pathogens	Negative
Heavy metal control	Conforms
Microbial control	Conforms
Solubility	Water soluble
Rec. use level	1 - 15%

Product Efficacy

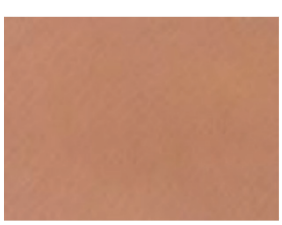
The reducing rate of ITA at different times



Tips: 9% Tanbest® 8810 ≈ 5% Tanbest® DHA + 2% Tanbest® DHB

Typical subject photos at 31 h:

8% Tanbest® DHA lotion



9% Tanbest® 8810 lotion

Result:

- Tanning effect: 9% Tanbest® 8810 lotion > 8% Tanbest® DHA lotion.
- Tanbest® DHB can promote the tanning effect of Tanbest® DHA.

Tanbest® Series Reference Formulas-Lotion

	Product Name	INCI Name	w/w%
A	Olivem® 1000	Cetearyl Olivate, Sorbitan Olivate	2.0
	SpecThem® GMS	Glyceryl Stearate	0.5
	Dicaprylyl Carbonate	Dicaprylyl Carbonate	2.0
	SpecKare® SQA	Squalane	2.0
	Dimethicone	Dimethicone	2.0
	SpecPure® Shea Butter 100	Butyrospermum Parkii (Shea) Butter	0.5
	SpecKare® VEA	Tocopheryl Acetate	0.5
B	Water	Water	To 100
	EDTA 2Na	Disodium EDTA	0.03
	Glycerin	Glycerin	3.0
	SpecThem® XTG200	Xanthan Gum	0.18
	SpecKare® ALLA	Allantoin	0.1
	SpecKare® DPA98	Panthenol	0.5
C	Butylene Glycol	Butylene Glycol	5.0
	SEPINOV™ EMT-10	Hydroxyethyl Acrylate/Sodium Acryloyldimethyl Taurate Copolymer	0.8
D	**SpecPlex® PCalm**	Poria Cocos Sclerotium Extract, Portulaca Oleracea Extract, Palmitoyl Tripeptide-8, Dipotassium Glycyrrhizate, Glycerin, Caprylyl Glycol, Ethylhexylglycerin, Water	3.0
	ParbFree® PCG	Caprylyl Glycol, Phenoxyethanol	0.8
	Fragrance	Fragrance	0.08
E	**Tanbest® DHA / DHA Premium / DHB / 8810**	Dihydroxyacetone / Dihydroxyacetone, Poria Cocos Sclerotium Extract, Soybean Lecithin, Propylene Glycol, 1,2-Hexanediol, Ethylhexylglycerin, Water/ Erythrulose, Water / Dihydroxyacetone, Erythrulose, Trehalose, Water	8.0/20.0/ 10.0/9.0

Procedure:

1. Disperse Xanthan gum in Glycerin, and mix with water until homogeneous, add the rest of B group and mix at 85℃;
2. Mix A part and heat to 85℃; Mix A and B, homogenize for 5min;
3. Cool to 60℃, add C and stir to homogeneous, cool to 45℃, add D;
4. Cool to 40℃, add E, cool to room temperature.

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*Interest in more information, please contact SC Group sales representatives